

**REMARKS/ARGUMENTS**

Claims 1 - 3, 5 - 16, 18 - 22, 24 - 28, 30 - 42, 44 - 48, 50 - 54, and 56 - 61 are now pending. Claims 1, 15, 21, 27, 33, 47, and 53 are independent. Claims 1, 9, 13, 14, 15, 20, 21, 27, 33, 38, 39, 47, 53, and 59 are amended.

Claim 59 is amended for an informality replacing "fist" with "first."

Claims 9, 13, 14, 38, 39, and 46 are rejected under 35 U.S.C. §112, first paragraph, because according to the Office Action, the disclosure does not teach the use of a third signal where the Viterbi decoding of the multiplied first signal is not based on the received third signal.

Claims 9, 13, 14, 38, 39, and 46 are amended. Claim 20 is also similarly amended. Amended claim 9, for example, recites "receiving a third signal between the first and second signals, wherein the Viterbi decoding of the multiplied first signal is not based on the received third signal."

Support for a third signal between the first and second signals where the Viterbi decoding of the first signal is not based on the third signal starts is provided throughout the specification and drawings. For example, in the paragraph starting on page 3, line 34 that describes Figure 2. According to this paragraph "The outputs of trellis encoders 203 and 207 are then punctured by switch 209. In other words, switch 209 selects between the output of trellis encoder 203 and trellis encoder 207. The punctured output of turbo encoder 200 is then provided to a channel 211." Further the paragraph starting on line 34 of page 4 of the specification continues that "switch 303 is added to the Viterbi decoder 301 so that only the symbols from trellis encoder 203 or trellis encoder 207 are used by the phase detector 217 to adjust the controlled oscillator 223.... Switch 303 will select every other symbol. Either a symbol from trellis encoder 203 will be selected or a symbol from trellis encoder 207 will be selected by switch 303."

The above passages indicate that if a third signal is inserted between the originally consecutive first and second signals that are from trellis encoder 203, this third signal is due to puncturing by the switch 209 and should not be used for the decoding process because it has been interleaved and encoded by a second and possibly different trellis encoder 207. These

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passages support the above rejected claims as amended. Accordingly, it is respectfully requested that the 35 U.S.C. §112 rejections be withdrawn.

Claims 1 - 3, 5 - 8, 10 - 11, 15 - 16, 18 - 19, 21 - 22, 24 - 25, 27 - 28, 30 - 31, 33 - 36, 40 - 42, 44 - 45, 47 - 48, 50 - 51, 53 - 54, and 56 - 59 are rejected under 35 U.S.C. §102(a) as being anticipated by Langlais et al., an IEEE publication, with a date of publication of November 22, 1999. Claims 9, 13 - 14, 38 - 39 and 46 are rejected under 35 U.S.C. §103(a) as being unpatentable over Langlais in view of Divsalar (U.S. Patent No. 6,023,783). Claims 12, 20, 26, 32, 37, 52, and 59 - 61 are rejected under 35 U.S.C. §103(a) as being unpatentable over Langlais in view of Robertson et al. another IEEE publication.

Enclosed is a declaration under 37 CFR 1.131 by the inventors of the above application showing a date of invention for the claimed subject matter of the application prior to the publication date of Langlais. Therefore, Langlais does not constitute a prior art for the above application. Accordingly, it is respectfully requested that the above rejection be withdrawn.

Applicants respectfully submit that all of the claims currently pending in this application are allowable over the cited reference, and reconsideration and allowance of this application are respectfully requested.

Respectfully submitted,  
CHRISTIE, PARKER & HALE, LLP

By   
Fariba Sirjani  
Reg. No. 47,947  
626/795-9900

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